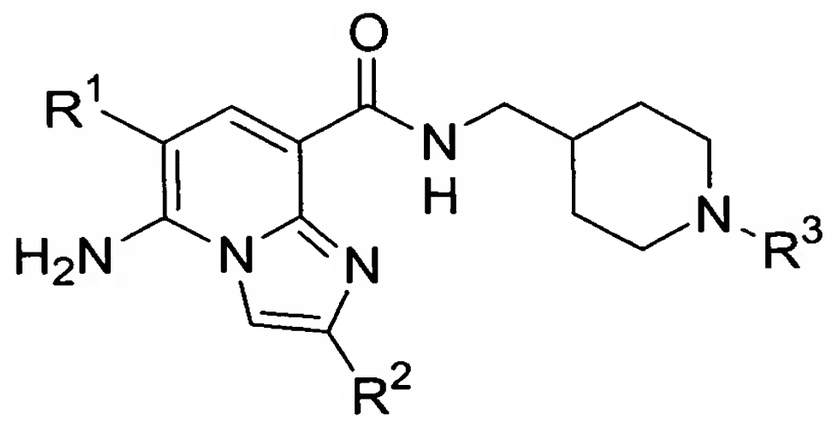
ABSTRACT

This invention provides a compound of the formula (I):



(I)

or a pharmaceutically acceptable salt, amide or ester thereof, wherein $\mathbf{R^1}$ represents a hydrogen atom or a halogen atom; $\mathbf{R^2}$ represents a hydrogen atom, etc.; $\mathbf{R^3}$ represents an alkyl group having from 1 to 10 carbon atoms; said alkyl group of $\mathbf{R^3}$ is substituted by at least one substituent selected from the group consisting of substituents α; said substituents α is aryl, hydroxy, oxo, etc.; said aryl having 6 to 10 carbon atoms; said aryl is unsubstituted or substituted by at least one alkyl group having from 1 to 6 carbon atoms; said heterocyclic and the heterocyclic moiety of said heterocycliccarbonyl, both of substituents α, are 5- to 10-membered cyclic groups containing from 1 to 4 heteroatoms selected from the group consisting of nitrogen atoms, oxygen atoms and sulfur atoms

These compounds have 5-HT_4 receptor binding activity, and thus are useful for the treatment of gastroesophageal reflux disease, non-ulcer dyspepsia, functional dyspepsia, irritable bowel syndrome or the like in mammalian, especially humans.

This invention also provides a pharmaceutical composition comprising the above compound.